

Appl. No. 10/801,433
Amdt. Dated Nov. 23, 2005
Reply to Office Action of Aug. 23, 2005

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (currently amended): A color filter comprising:

a transparent substrate;

a black matrix having an antireflection layer and a light-shielding layer successively formed on the transparent substrate, the antireflection layer ~~comprises~~ comprising a first antireflection film having a first index of refraction, and a second antireflection film formed on the first antireflection film and having a different second index of refraction, the first index of refraction being less than the second index of refraction; and

a color resin layer;

wherein the black matrix defines a plurality of apertures arranged in an array, the apertures being filled with the color resin layer, the color resin layer covering the black matrix entirely.

Claim 2 (original): The color filter as claimed in claim 1, wherein the antireflection layer comprises chromium oxide and chromium nitride, and the light-shielding layer comprises chromium.

Claim 3 (original): The color filter as claimed in claim 1, wherein the color resin layer comprises RGB (red, green, blue) resins.

Claim 4 (original): The color filter as claimed in claim 3, wherein the RGB resins fill each three contiguous apertures respectively.

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Claim 5 (original): The color filter as claimed in claim 4, wherein a respective portion of each of the RGB resins covers a corresponding portion of the black matrix.

Claim 6 (original): The color filter as claimed in claim 4, wherein each two respective adjacent portions of each of the RGB resins cover a corresponding portion of the black matrix.

Claim 7 (original): The color filter as claimed in claim 6, wherein said two respective adjacent portions are lapped on said corresponding portion of the black matrix.

Claim 8 (original): The color filter as claimed in claim 6, wherein all said two respective adjacent portions cooperatively cover an entirety of the black matrix.

Claim 9 (currently amended): A liquid crystal display device comprising:

an electrode substrate; and

a color filter comprising:

a transparent substrate;

a black matrix having an antireflection layer and a light-shielding layer successively formed on the transparent substrate, the antireflection layer comprising a first antireflection film having a first index of refraction, and a second antireflection film formed on the first antireflection film and having a second index of refraction, the first index of refraction being less than the second index of refraction; and

a color resin layer;

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wherein the black matrix defines a plurality of apertures arranged in an array, the apertures are filled with the color resin layer, the color resin layer covers the black matrix entirely, the electrode substrate in combination with the color filter forms a cavity therebetween, and the cavity is filled with a liquid crystal layer.

Claim 10 (currently amended): A color filter comprising:

a transparent substrate;

a black matrix applied upon said transparent substrate, said black matrix being divided into a plurality of units, and each unit of said black matrix having an anti-reflection layer and a light shielding layer, the antireflection layer comprising a first antireflection film having a first index of refraction, and a second antireflection film formed on the first antireflection film and having a second index of refraction, the first index of refraction being less than the second index of refraction; and

a color resin layer further applied to said transparent substrate and covering said black matrix;

wherein said color resin comprises RGB (red, green and blue) resins, and each unit of said black matrix is completely vertically covered by at least one of said RGB resins.